# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Sherry Leonard et al.

Serial No.:

08/956,518

10/23/97

Group No.: 1645 Examiner:

R. Hayes

Filed: Entitled:

**ALPHA-7 NICOTINIC RECEPTOR** 

TEMENT OF APPLICANTS **UNDER 37 CFR § 1.251** 

Gary Kunz

United States Patent & Trademark Office

Arlington, VA 22202

### CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1:10

I hereby certify that this correspondence (along with any referred to as being attached or enclosed) is, on the date shown below, being deposited with the U.S. Postal Service in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EV 001 613 469 US, addressed to: Gary Kunz, United States Patent & Trademark Office, Arlington, VA 22202

Dated: May 13, 2002

Sir:

The copy of the listed documents is a complete and accurate copy of Applicants' record of all of the correspondence between the Office and Applicants, for U.S. Patent Appln. Serial No. 08/956,518. Applicants are not aware of any correspondence between the Office and Applicants, for U.S. Patent Appln. Serial No. 08/956,518, that is not among Applicants' records.

Signing on behalf of:

Dated: May 13, 2002

David A. Casimir

Registration No. 42,395

MEDLEN & CARROLL, LLP 101 Howard Street, Suite 350 San Francisco, California 94105 415.904.6500

	ė	Serial No.: 08/956,518	MC File No.: UTC -	
PE	70	In The Matter of the Application Of: Date Mailed: 07/15/99	SHERRY LEONARD	et al.
<b>/</b> 0 '	-~	Date Mailed: 07/15/99	Due Da	ate: 07/09/99
MAY 13	Mor		e U.S. Patent and Trademark Office on	the date stamped hereon:
THAT A TRA	De	Pages Plant Patent Application Pages Plant Patent Application Pages Prov. Patent Application Pages Utility Patent Application Pages Information Disclosure Statement Form PTO-1449 and Copies of References Contained Thereon Form PTO-1533 (Not. of Missing Parts) Certificate Re: Sequence Listing Sequence Listing in Paper Copy and on Computer Readable Diskette Form PTO-1558 (Issue Fee Transmittal) Form PTO-1050 (Cert. of Correction) Maintenance Fee Transmittal Form Reexamination Request PCT Application Pages	☐ ITU Trademark Application ☐ Statement of Use ☐ Trademark Renewal Application ☐ Section 8 & 15 Affidavits ☐ Specimens ☐ Declaration/Oath/Affidavits ☐ Drawings: Sheet(s) ☐ Formal ☐ Informal ☐ Power of Attorney ☐ Form PTO-1594/1595 ☐ Assignment ☐ Small Entity Declaration  20 Amendment/Response to Restriction 21 Amendment/Response to Restriction 22 Extension of Time Req.: Month(\$)	FOR PTO USE
		☐ Chapter II Demand	Petition	-

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# MEDLEN & CARROLL, LLP

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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Sherry Leonard et al.

Serial No.:

08/956,518

Group No.: 1645

Filed:

10/23/97

Examiner: R. Hayes



# RESPONSE TO NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE

**ALPHA-7 NICOTINIC RECEPTOR** 

Assistant Commissioner for Patents Washington, D.C. 20231

# CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1:8(a)(1)(i)(A)

I hereby certify that this correspondence (along with any referred to as being attached or enclosed) is, on the date shown below, being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

Sir:

In response to the Notice to Comply mailed 03/23/99, please make the following amendments:

# IN THE SPECIFICATION:

Please replace pages "89 to 122" with new pages --89 to 122-- (attached hereto), which contain the "substitute" Sequence Listing in this patent application.

## REMARKS

This amendment reflects the introduction of a "substitute" Sequence Listing, finds support in the application and Figures, and does not introduce new matter.

# **CONCLUSION**

Should the Examiner have any questions regarding the above or believe that a telephone interview would aid in the prosecution of this application, Applicants encourage the Examiner to call the undersigned collect.

Dated: 1 April 1999

Kamrin T. MacKnight Registration No. 38,230

MEDLEN & CARROLL, LLP 220 Montgomery Street, Suite 2200 San Francisco, California 94104 415.705.8410 Application No.:\_\_\_ 6518

# NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

OFE		attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.
MAY 1 3 2002	121	2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
RADEMA		3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
	x	4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
		5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
		<ol><li>The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).</li></ol>
		7. Other:
	Ap	plicant Must Provide:
	X	An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
	X	An i <del>nitial o</del> r substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
	X	A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).
	Fo	r questions regarding compliance to these requirements, please contact:
		r Rules Interpretation, call (703) 308-4216
		or CRF Submission Help, call (703) 308-4212
	Pa	itentin Software Program Support (SIRA)
		Technical Assistance703-287-0200

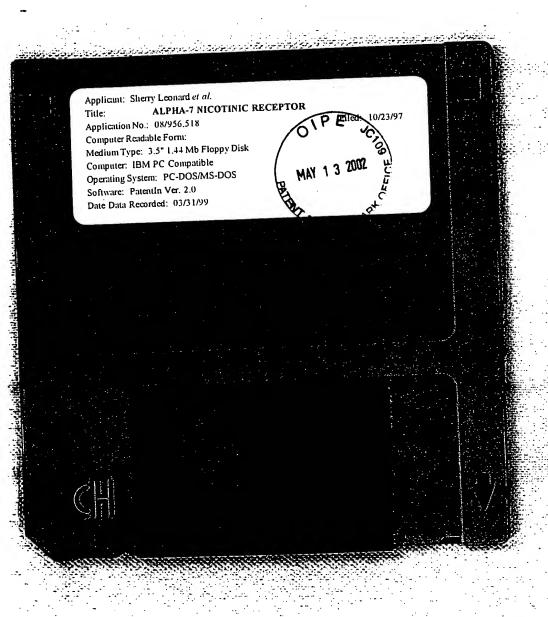
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08/956,518

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KAMRIN T. MACKNIGHT

220 MONTGOMERY STREET

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10/23/97

LEONARD

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UTC-03042

HM12/0609

**EXAMINER** 

HAYES, R

ART UNIT

PAPER NUMBER

1645

DATE MAILED:

06/09/99

Besp. 7/9/99 RLD

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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**MEDLEN & CARROLL** 

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OIPE	Application No. <b>08/956,518</b>	Applicant	, ,			
Office Action Summary	Examiner	Leonard et al				
MAY 1 3 2002 (1)	Robert C. Ha		Group Art Unit 1645			
Responsible to communication(s) filed on				· ·		
☐ This action is FINAL.						
☐ Since this application is in condition for allowance in accordance with the practice under Ex parte Qu		-		rits is closed		
A shortened statutory period for response to this action is longer, from the mailing date of this communication application to become abandoned. (35 U.S.C. § 133) 37 CFR 1.136(a).	. Failure to respond with	in the peri	od for response v	vill cause the		
Disposition of Claims						
X Claim(s) 1-25		is/ard	e pending in the a	pplication.		
Of the above, claim(s)		is/are	withdrawn from c	consideration.		
Claim(s)			is/are allowed.			
Claim(s)			is/are rejected.			
Claim(s)				<b>)</b> .		
X Claims 1-25						
Application Papers						
☐ See the attached Notice of Draftsperson's Pater	-					
☐ The drawing(s) filed on is/	are objected to by the Exa	aminer.				
☐ The proposed drawing correction, filed on		proved	⊡disapproved.			
☐ The specification is objected to by the Examiner						
The oath or declaration is objected to by the Ex-	aminer.					
Priority under 35 U.S.C. § 119		C 440/ \				
<ul><li>☐ Acknowledgement is made of a claim for foreig</li><li>☐ All ☐ Some* ☐ None of the CERTIFIED</li></ul>	n priority under 35 U.S.C. copies of the priority doc					
received.	copies of the phonty doc	.uments n				
received in Application No. (Series Code/s	Serial Number)					
received in this national stage application						
*Certified copies not received:				·		
☐ Acknowledgement is made of a claim for domes	stic priority under 35 U.S.	C. § 119(	e).			
Attachment(s)						
☐ Notice of References Cited, PTO-892				•		
☐ Information Disclosure Statement(s), PTO-1449,	Paper No(s).					
<ul><li>☐ Interview Summary, PTO-413</li><li>☐ Notice of Draftsperson's Patent Drawing Review</li></ul>	, PTO-948					
☐ Notice of Informal Patent Application, PTO-152	, i i 0-340					
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--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Application/Control Number: 08/956518 Page 2

Art Unit: 1645

# **DETAILED ACTION**

# Election/Restriction

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1, 3-8, drawn to nucleic acid molecules encoding the alpha-7 nicotinic receptor, vectors and host cells, classified in class 435, subclass 325.
  - II. Claim 2, drawn to alpha-7 nicotinic receptor polypeptides, classified in class 530, subclass 350.
  - III. Claims 9-13, drawn to a method of detecting alpha-7 nicotinic receptorpolynucleotides in a biological sample, classified in class 435, subclass 5.
  - IV. Claim 14-25, drawn to method of amplifying alpha-7 nicotinic receptor polynucleotides, classified in class 435, subclass 91.2.
- 2. The inventions are distinct, each from the other because of the following reasons:

Although there are no provisions under the section for "Relation of Inventions" in MPEP 806.05 for inventive groups that are directed to different products; restriction is deemed proper because these products appear to constitute patently distinct inventions for the following reason:

Groups I-II are directed to products that are physically and functionally distinct that involve nucleic acids or proteins. Each of these products can be prepared by different processes, such as though chemical synthesis or isolation from natural sources using various isolation/

Application/Control Number: 08/956518

Art Unit: 1645

purification procedures. For example, the polypeptides of Group II are fundamentally different molecules than the polynucleotides of Group I, which in turn can be used to clone proteins, detect expression of the gene product, or used as therapeutic agents in gene therapy. Alternatively, the proteins of Group II can be utilized to generate antibodies. It is pointed out that there is a proper distinction between these groups, since each product is not required in order for the other to exist. Thereby, these groups are distinct and separable for the reasons stated.

Page 3

Groups I and III-IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)). In the instant case, the nucleic acids can be used in materially different processes, such as to encode the full length protein or used in gene therapy. The method of detecting and amplifying nucleic acid molecules requires primers and appropriate salt and hybridization conditions, which are not required for the products of Group I. It is further noted that the methods of Groups III & IV do not require the products of Group II.

Although there are no provisions under the section for "Relation of Inventions" in MPEP 806.05 for inventive groups that are directed to different methods; restriction is deemed proper because these methods appear to constitute patently distinct inventions for the following reason:

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Groups III-IV are directed to methods of detecting or amplifying nucleic acid molecules. Each of the methods require physically and functionally distinct elements. For example, the method for detecting the presence of a nucleic acid molecule is distinguished from the method for amplifying a nucleic acid by PCR of Group IV, in that the diagnostic method of Group III requires inclusion of labeled nucleotides, unlike the PCR method of Group IV, which requires appropriate primers. Moreover, the method involving generation of PCR reaction products require purification protocols specific to isolating and detecting small nucleic acid molecules, unlike the method of Group III. These inventions are, therefore, patentably distinct, since one is not required for the other.

3. Because these inventions are distinct for the reasons given above, they have acquired a separate status in the art as shown by their different classification, and the non-coextensiveness of the search and examination for each group would constitute an undue burden on the examiner to search and consider all the separable groups, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently

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named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

4. Please Note: In an effort to enhance communication with our customers and reduce processing time, Group 1640 is running a Fax Response Pilot for Written Restriction Requirements. A dedicated Fax machine is in place to receive your responses. The Fax number is 703-305-3704. A Fax cover sheet is attached to this Office Action for your convenience. We encourage your participation in this Pilot program. If you have any questions or suggestions please contact Donald E. Adams, Ph.D., Supervisory Patent Examiner at Donald.Adams@uspto.gov or 703-308-0570. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Robert Hayes whose telephone number is (703) 305-3132. The examiner can normally be reached on Monday through Thursday, and alternate Fridays, from 8:30 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa, can be reached on (703) 308-3995. The fax phone number for this Group is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

(7C)/

Robert C. Hayes, Ph.D. June 8, 1999

ANTHONY C. CAPUTA SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600





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Serial No.:	MC File No.: UTC- 3	042 By: Ktm
In The Matter of the Application Of:	LEONARDO FT JES AL	
<b>Date Mailed: 10/23/9</b> 子	08/956518 Due Da	1
The following has been received in the	U.S. Pater and Control on	the date stamped hereon:
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References Contained Thereon	Declaration/Oath/Affidavits ( )	<u> </u>
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☐ Maintenance Fee Transmittal Form	☐ Amendment/Response	
☐ Reexamination Request	☐ Extension of Time Req.: Month(s)	
☐ PCT ApplicationPages	□ Notice of Appeal	
☐ Chapter II Demand	☐ Petition	-
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